



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/418,562	10/15/1999	JACOBUS C. HAARTSEN	040070-549	9055
21839	7590	10/20/2004	EXAMINER	
BURNS DOANE SWECKER & MATHIS L L P			ODOM, CURTIS B	
POST OFFICE BOX 1404			ART UNIT	
ALEXANDRIA, VA 22313-1404			PAPER NUMBER	

2634

DATE MAILED: 10/20/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/418,562

Applicant(s)

HAARTSEN, JACOBUS C.

Examiner

Curtis B. Odom

Art Unit

2634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-8,10,12-23,25 and 27-38 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8,10,12-23,25 and 27-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 October 1999 is/are: a) ☒ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-8 10, 12-23, 25, and 27-38 recite the limitation "the physical channel" in claims 1 and 16. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-8, 16-23, and 35-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Gillis et al. (previously cited in Office Action 12/30/02).

Regarding claim 1, Gillis et al. discloses a method of selecting a hop channel for use in a channel hopping communication system that includes a sequence of hop channels (column 5, lines 1-20), wherein the sequence comprises a set of forbidden hop channels and a remaining set of allowable hop channels (column 9, lines 2-59), wherein the channels with interference are forbidden hop channels, the method comprising:

selecting (Fig. 1, blocks 110, 115, 120, 210, 215, and 220, column 9, lines 2-59) a hop channel (channel X) from the sequence as a function of a present phase;

if the selected hop channel is an allowable hop channel, then using the selected hop channel for communication during the present phase (Fig. 1, blocks 10 and 20, column 8, lines 20-43);

if the selected hop channel is a forbidden hop channel then using a time-varying parameter to select at the present phase a substitute hop channel from the set of allowable channels, (Fig. 1, blocks 110, 115, 120, 210, 215, and 220, column 9, line 60-column 10, line 33), wherein the time-varying parameter (pseudo-random number/code based on clock value as shown in Fig. 1, blocks 110 and 115) is independent of conditions on the physical channel, wherein using the random number routine to identify available substitute channels allows the selection of a substitute channel based on a time-varying parameter; and

using (column 10, lines 24-33) the substitute hop channel (channel Y) for communication during the present phase.

Regarding claim 2, which inherits the limitations of claim 1, Gillis et al. discloses the time-varying parameter is a clock value (Fig. 1, block 215, column 5, lines 43-48 and column 8, lines 3-8).

Regarding claim 3, which inherits the limitations of claim 1, Gillis et al. discloses the time-varying parameter and the present phase are derived from the same clock value (column 1, lines 44-48 and column 8, lines 2-66).

Regarding claim 4, which inherits the limitations of claim 1, Gillis et al. discloses the time-varying parameter is a randomly selected value (column 9, line 60-column 10, line 33).

Regarding claim 5, which inherits the limitations of claim 1, Gillis et al. discloses the time-varying parameter is a pseudo-randomly selected value (column 9, line 60-column 10, line 33).

Regarding claim 6, which inherits the limitations of claim 1, Gillis et al. discloses at least one of the forbidden channels is associated with received interference from a jammer (column 9, lines 2-19), wherein the unrecognizable signal is a jammer.

Regarding claim 7, which inherits the limitations of claim 1, Gillis et al. discloses at least one of the forbidden hop channels is reserved for used by a communication system that is not the channel hopping communication system (column 1, lines 27-60, other cordless telephone systems).

Regarding claim 8, which inherits the limitations of claim 1, Gillis et al. discloses dynamically determining the set of forbidden hop channels, whereby the set of the forbidden hop channels varies over time (column 10, lines 14-23).

Regarding claim 35, which inherits the limitations of claim 1, Gillis et al. discloses the substitute hop channel need not be the same as the previously selected substitute channel for the forbidden hop channel (column 10, lines 5-23).

Regarding claim 36, which inherits the limitations of claim 1, Gillis et al. discloses eh time-varying parameter is based on a system clock (column 1, lines 44-48 and column 8, lines 2-66).

Regarding claims 16-23, 37, and 38 the claimed apparatus includes features corresponding to the above subject matter mentioned in the above rejections of claims 1-8, 35, and 36 which is applicable hereto.

Conclusion


5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Dent (U. S. Patent No. 4, 476, 566) discloses a frequency hopping method using a clock value to select the frequency hopping channels and identify and store available and unavailable hopping channels.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Curtis B. Odom whose telephone number is 571-272-3046. The examiner can normally be reached on Monday- Friday, 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen Chin can be reached on 571-272-3056. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Curtis Odom
October 12, 2004


STEPHEN CHIN
SUPERVISORY PATENT EXAMINE
TECHNOLOGY CENTER 2800